

The Solar and Heliospheric Observatory (SOHO) Implementation Plan 2006

SOHO has a vigorous dissemination program of SOHO content for all audiences and the media. Over the years we have developed numerous posters, handouts, cards, CDs and other products, made a number of connections with museums; worked with TV production companies; coordinated with other Sun-Earth outreach teams, and have had a degree of successes in reaching a national audience.

For this implementation plan, this description will be limited to what the mission is currently doing and planning. The highlight of this year will be SOHO's 10th anniversary. To help support the renewed interest we expect the anniversary to bring, we plan to work with the Goddard PAO to assemble a media package, will be producing a new poster, are planning to order mission patches (through the European Space Agency), and a new single page (two-sided) litho providing an overview of the mission.

Web outreach:

Since the beginning of 2005, SOHO has added three new features to its web site to engage different audiences. We have added a monthly section called Outreach Spotlight in which we feature an individual or group that engages in astronomical outreach, with some emphasis on solar observation. It is hoped that others reading these features will be inspired to follow the models being presented and adapt some of their methods for reaching out to the public.

We have also sponsored two contests. SunWorks is a monthly art contest with solar themes for three groups of people: Grades 4-8, 9-12, and adults. Each month a winner and runner-up are selected in each category with small prizes going to each winner. After 10 months the contest will end, and grand winners will be selected. We believe that art teachers (and others) here and around the world will take advantage of this opportunity to blend art and science.

The other contest is the SOHO Comet Contest in which we challenged the public to guess when SOHO would discover its 1,000th comet. (At the time we had found about 900.) Entries were disallowed after we reached 960 comets. We received almost 9,000 guesses. To make this more effort more educational we listed the dates when we found each increment of 100 so that teachers could work this into a probability and estimating exercise. We also pulled together a number of video clips and links to our best examples of comets that we have captured to extend the learning for those who visit the site.

We continue to update the SOHO website with our Pick of the Week section to help our viewers more easily find the best of what we are observing. This online archive serves as an easy reference tool as well. Higher resolution images and movies of our Weekly Picks are sent to the American Museum of Natural History for their AstroBulletins each week, which in turn is distributed to about a dozen other museum venues.

Media:

SOHO staff worked closely with Noreen Grice to develop the new Braille and raised graphics book called Touch the Sun due for release in September 2005. Staff selected images, edited text, and designed the cover. All but one of the images are from SOHO. It is being published by Joseph Henry Press and will be distributed largely through the American Federation for the Blind. . A new technique for developing the raised portions of images is setting a new level of accomplishment for this kind of book. NASA funding supported most of the production costs.

Staff respond quickly to requests from various production companies, museums, book publishers, magazines and the like to provide them with high resolution video and images.

Current/New Products:

SOHO has led the way in the development of lenticulars as a popular tool for engaging students and adults, a way to present motion and depth on a handout the size of a postcard. They have produced three different cards portraying different aspects of the Sun. Over 180,000 of these have been produced and distributed. Other missions have now begun to develop their own. Over 100,000 more of the 3-D sun cards are being reprinted. SOHO continues to share its lenticulars with other solar missions to support their own outreach efforts,

The Dynamic Sun CD is an educational resource now in its fifth version. Included on the CD are multimedia presentations on the Sun in English and Spanish (with over 100 video clips); teacher guides; a tracking sunspots exercise; an image set; Storms from the Sun poster that comes to life with video buttons; and FAQs. Over 200,000 produced and distributed. This is shown and handed out at workshops and conferences as an easy, engaging and effective way to bring solar science into the classroom. Additional reprints are in the works.

Education:

SOHO also has two model collaborations that target educators and students: FiMS (Fellowships in Mathematics and Science), a partnership grant with the Pa. Department of Ed. (in 3 school systems), is a strong example of the power of working directly with the local formal education system. SOHO educators and scientists work with their local teachers to increase content knowledge and support their ability to develop and implement inquiry-based lessons that are tied to state standards and the current curriculum. The Endeavour program, a collaboration between SOHO/NASA and 18 school systems in Pennsylvania, gives teams of students real-life NASA problems to research. Students are supported by teacher team leaders that have been exposed to the content and training through professional development.

Conferences/Workshops:

Steele Hill will represent SOHO outreach at the NASA EPO workshop in Tucson, AZ in September and will be presenting a half-hour workshop on hands-on outreach. He will also be presenting an overview on SOHO and the Sun at Coronado's Hands on the Sun

workshop in October. He will also help at the NASA booth at Association of Science and Technology Centers Conference (ASTC) in October.

Outreach Collaborations:

SOHO has begun working with the Earth Today program to see how it can incorporate up-to-date solar movies, images and information into this outreach effort for museums.

In collaboration with STSCi, a solar module called Helios was developed to be part of the popular ViewSpace program in which short (10-15 minute) video programs are presented free to over 100 museums for viewing in a small theatre-like setting.

The SOHO media specialist is designing and writing the content for an eclipse poster for SECEF as part of Sun-Earth Day 2006. He will also be coordinating and consulting with the Stereo education and outreach team.

Staff are consulting with the American Museum of Natural History on their third planetarium show. They have been provided with about 25 sample video clips from SOHO, and then passed the frames for the clips that they want to use in the show.